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CLAIMS:

What is claimed is:

- 5 1. A method in a graphics adapter for displaying an object, the method comprising:
- receiving position coordinates and texture coordinates for the object;
- inverting a depth coordinate associated with the position and the texture coordinates to form an inverted coordinate;
- 10 multiplying the position coordinates and the texture coordinates by the inverted coordinate to form adjusted position coordinates and adjusted texture coordinates;
- 15 and
- displaying the object using the adjusted position coordinates and the adjusted texture coordinates.
2. A graphics pipeline comprising:
- 20 an input, wherein the input receives graphics data, wherein the graphics data includes position coordinates and a depth coordinate for an object;
- an output, wherein the output transmits processed graphics data;
- 25 a plurality of processing elements, wherein the plurality of processing elements generates the processed graphics data, wherein a first processing element within the plurality of processing elements is connected to the input and a last processing element within the plurality
- 30 of processing elements is connected to the output, and wherein a selected processing element within the

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plurality of processing element receives the position coordinates and the depth coordinate, inverts the depth coordinate to form an inverted depth coordinate, and multiplies the position coordinates by the inverted depth coordinate.

3. The graphics pipeline of claim 2, wherein the selected processing element comprises:

a first stage, wherein the first stage receives the position coordinates and the depth coordinate and inverts the depth coordinate; and

a second stage, wherein the second stage multiplies the position coordinates by the inverted depth coordinate.

4. The graphics pipeline of claim 2, wherein the graphics data includes texture coordinates and wherein the selected processing element multiplies the texture coordinates by the inverted depth coordinate.

5. The graphics pipeline of claim 4, wherein the selected processing element comprises:

a first stage, wherein the first stage receives the position coordinates, the texture coordinates, and the depth coordinate and inverts the depth coordinate; and

a second stage, wherein the second stage multiplies the position coordinates and the texture coordinates by the inverted depth coordinate.

6. The graphics pipeline of claim 5, wherein processing of the position coordinates and the texture coordinates

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for an object occurs within five clock cycles.

7. A graphics adapter comprising:

an input configured to receive graphics data;

5 a frame buffer, wherein processed graphics data is stored for display;

a raster engine connected to the input and to the frame buffer, wherein the raster engine rasterizes the processed graphics data for display; and

10 a geometry engine connected to the raster engine, wherein the geometry engine receives the graphics data from the raster engine, processes the graphics data to form the processed graphics data, and returns the processed graphics data to the raster engine and wherein the
15 geometry engine includes a set of processing elements in which a selected processing element within the set of processing elements receives position coordinates and a depth coordinate, inverts the depth coordinate to form an inverted depth coordinate, and multiplies the position
20 coordinates by the inverted depth coordinate.

8. The graphics adapter of claim 7, wherein the graphics data includes texture coordinates and wherein the selected processing element multiplies the texture
25 coordinates by the inverted depth coordinate.

9. The graphics adapter of claim 8, wherein the selected processing element comprises:

30 a first stage, wherein the first stage receives the position coordinates, the texture coordinates, and the depth coordinate and inverts the depth coordinate; and

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a second stage, wherein the second stage multiplies the position coordinates and the texture coordinates by the inverted depth coordinate.

5 10. The graphics adapter of claim 7, wherein processing of position coordinates and texture coordinates for an object occurs within five clock cycles.

10 11. A graphics adapter for displaying an object, the graphics adapter comprising:

receiving means for receiving position coordinates and texture coordinates for the object;

15 inverting means for inverting a depth coordinate associated with the position and the texture coordinates to form an inverted coordinate;

multiplying means for multiplying the position coordinates and the texture coordinates by the inverted coordinate to form adjusted position coordinates and adjusted texture coordinates; and

20 displaying means for displaying the object using the adjusted position coordinates and the adjusted texture coordinates.

25 12. A computer program product in a computer readable medium for displaying an object, the computer program product comprising:

first instructions for receiving position coordinates and texture coordinates for the object;

30 second instructions for inverting a depth coordinate associated with the position and the texture coordinates to form an inverted coordinate;

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third instructions for multiplying the position coordinates and the texture coordinates by the inverted coordinate to form adjusted position coordinates and adjusted texture coordinates; and

- 5 fourth instructions for displaying the object using the adjusted position coordinates and the adjusted texture coordinates.

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